

## 3-D Topographic Map

Name \_\_\_\_\_

Date \_\_\_\_\_ Per \_\_\_\_\_

**Purpose:** To make a 3-D model from a topographic map.

The students will compare the 3-D model to the original topographic map to gain an understanding of the relationship of geographic features to the representation of the features on a map.

### Materials:

- Metric ruler
- Map pencils
- Glue
- Scissors
- Topographic map
- Copies of Topo. map for each layer
- Cardboard (flat pieces from boxes)

### Procedure:

#### A. Preparations

- For a given map, decide how many layers would be appropriate for illustrating the area's *relief*. Using one copy of the map for each page outline the appropriate *contour line*.
- Cut out each level (layer) of the topo map copies.
- Glue the cut out onto a piece of cardboard.
- Cut cardboard neatly around each layer.
- Label each layer with the contour of that line.
- Start with the largest shape and glue it to the base.
- Glue each contour--largest to smallest--on the base. Refer to the original map for exact placement.

#### C. Include on Your Map

- Legend with all symbols
- Compass Rose
- Contour interval

#### D. Other Requirements

- Map must match model
- Neatness and variety of color
- Creativity

## **E. Discussion**

Compare your model to the original topographic map you used and answer the following questions:

1. Does this map represent a gently sloping area and a steeply sloped area? How do you know?
2. Can you tell which way the stream flows by looking at the topographic map? How?
3. What is the elevation of the highest point? Lowest point?
4. What is the *relief* of your map?